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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,920	03/17/2003	Doug Kennon	BAC161	2336

7590 10/23/2006
AMSTED Industries Incorporated
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Chicago, IL 60601

EXAMINER

DUONG, THO V

ART UNIT	PAPER NUMBER
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3744

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/713,920

Applicant(s)

KENNON, DOUG

Examiner

Tho v. Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8 and 10-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Receipt of applicant's amendment filed 8/11/06 is acknowledged. Claims 1,3-8 and 10-14 are pending.

Response to Arguments

Applicant's arguments filed 8/11/06 have been fully considered but they are not persuasive. Applicant's argument that Robers fails to disclose any vertical supports extending between the top and bottom portions and the fan assembly attached to the vertical support, has been very carefully considered but is not deemed to be persuasive. Applicant is advised to see figure A (bellow), which corresponds to figure 2 of Roberts with the claimed limitations shown. Furthermore, applicant's argument that Askin fails to disclose any vertical supports extending between the top and bottom portions of the structure, has been very carefully considered but is not deemed to be persuasive. Applicant is advised to see figure B (bellow), which corresponds to figure 2 of Askin with the claimed limitation shown.

Claim Objections

Claim13 is objected to because of the following informalities: there are two identical set of claim 13. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4,7-11 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Roberts et al. (US 6,272,876). Roberts discloses (figures 2 and 6) a heat exchanger comprising a plurality of circuits each coil circuit, each extending from an inlet header and an outlet headers (78,134), each coil circuit comprised of elongated tubing (66); a structure (44) supporting the coil circuits, the structure having an inlet and an outlet face; a fan assembly comprising a base support (46) and a fan (62), with the fan mounted on the base support mounted adjacent the inlet face such that air can be drawn by the fan assembly with the inlet face across the coil circuit and out the outlet face; wherein the fan assembly can be readily attached and detached from the inlet face; the structure (44) includes a top portion , bottom portion and a plurality of vertical supports extending vertically between the top portion and the bottom portion; and the fan mounted on the base support such that the base support has a generally flat edge (peripheral edge of 46); the flat edge of the base support being positioned adjacent and attached to the top portion, bottom portion and the vertical support of the structure by bolt; the fan assembly includes an extending section (wall of 46) between the flat edge (48,50) of the base support and the fan (19) such that the fan (19) is spaced from the flat edge (48,50). Regarding claims 7 and 14, Roberts further discloses (figure 2) the extending section includes a top section (from fan to edge 50) and a bottom section (from fan to edge 48), and the top section is of a length greater than the length of the bottom section such that the fan is wanted at an angle to the inlet face.

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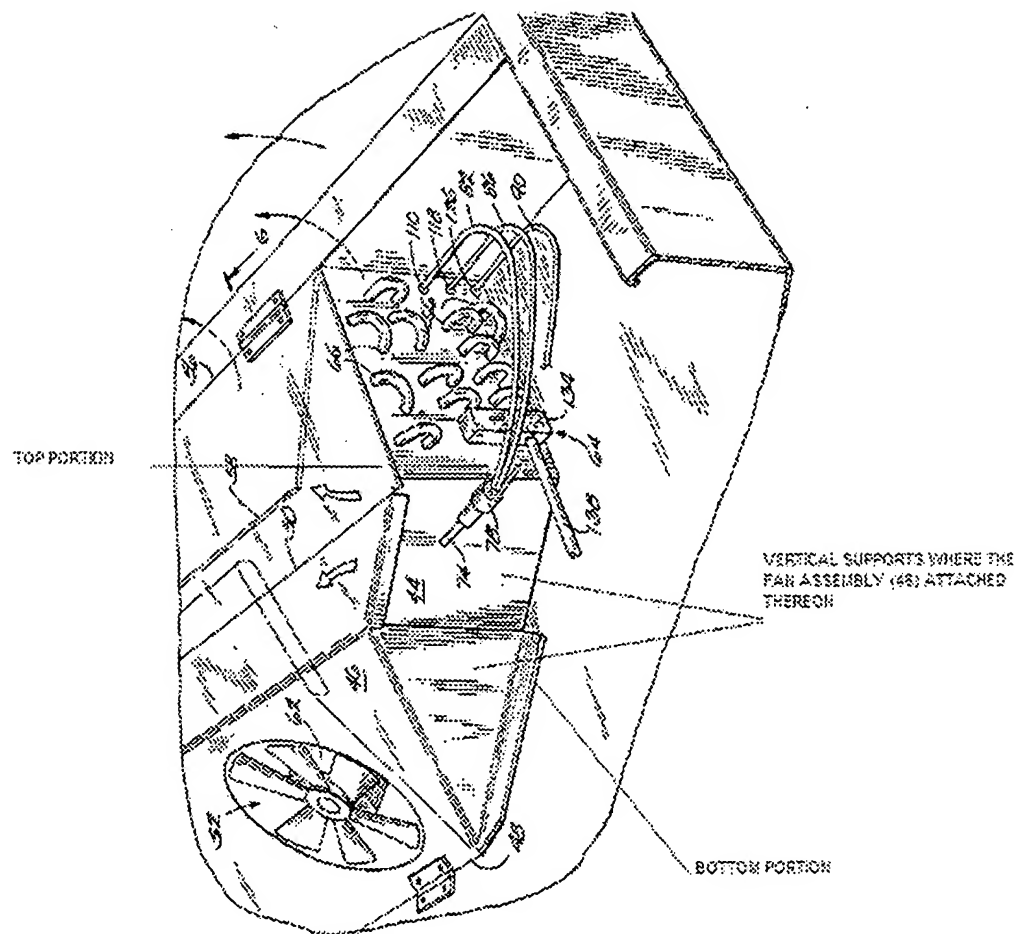


Figure A: The modified figure corresponds to figure 2 of Roberts with top, bottom and vertical portions shown

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over J. Askin (us 2,042,420) in view of F. T. Elder et al. (US 2,401,918). Askin discloses (figures 1-3) a heat exchanger comprising a plurality of circuits each coil circuit comprised of elongated tubing (27); a structure (10) supporting the coil circuits, the structure having an inlet and an outlet face; a fan assembly comprising a base support and a fan (19), with the fan mounted on the base support at compartment (14) mounted adjacent the inlet face such that air can be drawn by the fan assembly with the inlet face across the coil circuit and out the outlet face; wherein the fan assembly can be readily attached and detached from the inlet face; the structure (10) includes a top portion, bottom portion and a plurality of vertical supports extending vertically between the top portion and the bottom portion; and the fan mounted on the base support such that the base support has a generally flat edge (flange of 16); the flat edge of the base support being positioned adjacent and attached to the top portion, bottom portion and the vertical support of the structure by bolt (22); the fan assembly includes an extending section (21) between the flat edge of the base support and the fan (19) such that the fan (19) is spaced from the flat edge, and wherein the extending section is formed of sheet metal and in uniform dimension such that the fan (19) is mounted in a plane perpendicular to the inlet face. Askin does not disclose that the plurality of coil circuit extending from an inlet header and an outlet header. Elder discloses (figure 4) a coil heat exchanger that has a plurality of coil circuits, each extending from an inlet header (24) and

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outlet header (26) for a purpose of fluidly connecting all the coil circuits together without having forming the plurality circuits from a long single coil. Since Askin and Elder are both from the same field of endeavor and/or analogous art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use Elder's teaching in Askin's heat exchanger for a purpose of fluidly connecting all the coil circuits together without having forming the plurality of circuits from a long single coil.

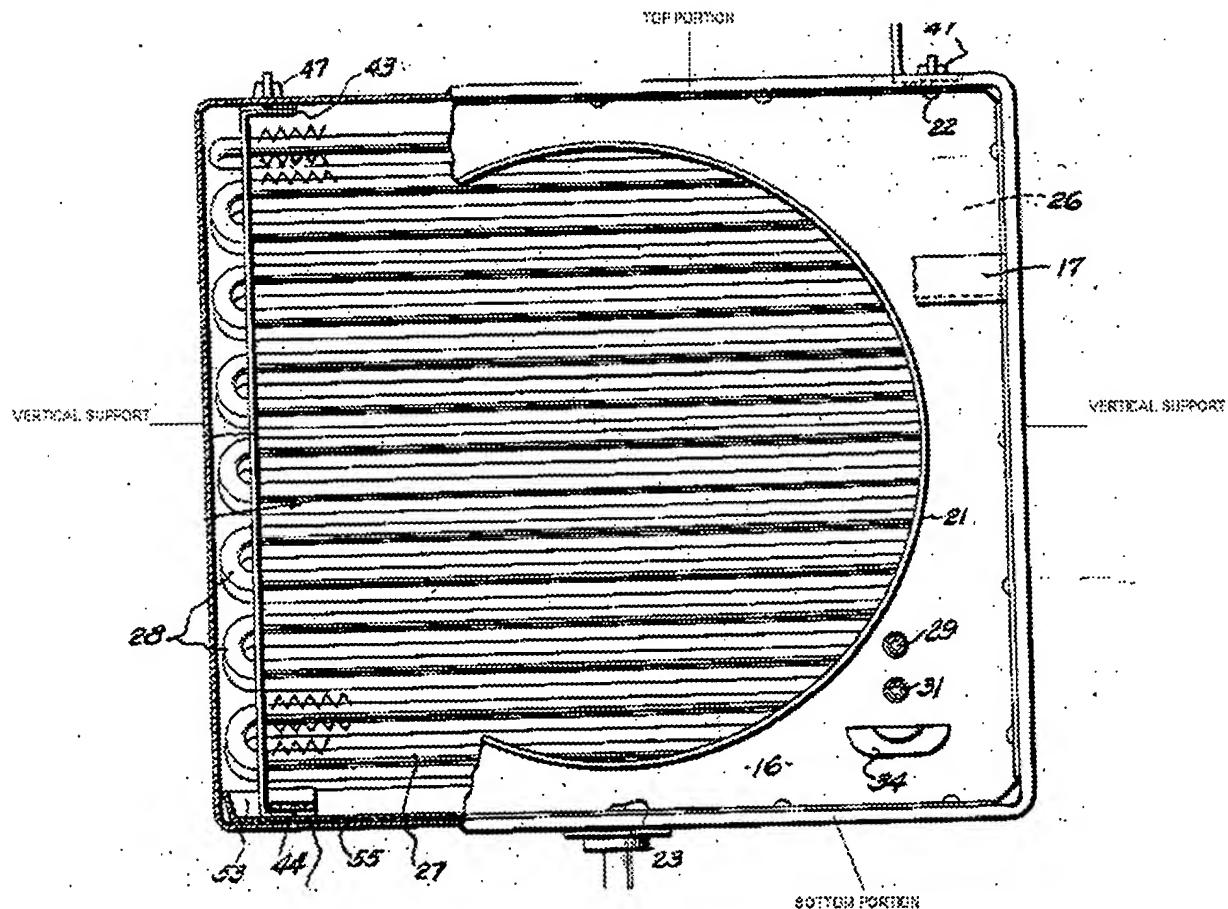


Figure B: the modified figure corresponds to figure 2 of Askin with bottom, top and vertical portions shown

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho v. Duong whose telephone number is 571-272-4793. The examiner can normally be reached on M-F (first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tyler J. Cheryl can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tho v Duong
Primary Examiner
Art Unit 3744

TD
October 16, 2006